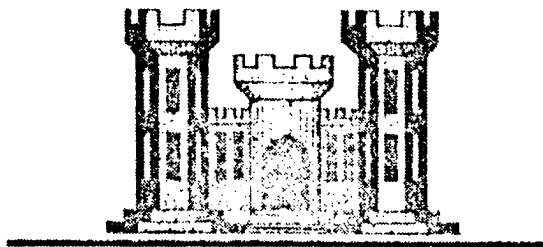


REVIEW REPORT ON SURVEY
OF
KAWAIHAE HARBOR
FOR NAVIGATION
ISLAND OF HAWAII, HAWAII



U.S. ARMY ENGINEER DISTRICT, HONOLULU
12 NOVEMBER 1963

SYLLABUS

The District Engineer finds an urgent need for the modification of Kawaihae Harbor, Hawaii, to provide greater maneuvering space for the safe navigation of bulk sugar carriers and to reduce the problem of wave action and surge, which now handicaps berthing and cargo handling and also causes damage to small craft. The Hawaiian sugar industry is currently utilizing larger freighters to move its raw products to the mainland than were anticipated at the time Kawaihae Harbor was designed. These larger vessels of the C-4 class do not call at Kawaihae under present conditions because of the navigational hazard. Consequently, one of the primary objectives of the existing project, that of generating transportation savings to the local sugar industry, is not being effectively attained. The reporting officer additionally finds a pressing need for a suitable small craft marina at Kawaihae for the safe accommodation of the present and forthcoming boat population of the harbor tributary area.

The District Engineer concludes that these needs can best be met by widening the outer entrance channel by 100 to 120 feet, for a distance of 1,200 feet, along its northerly side, and by enlarging the harbor basin along its seaward and southerly sides by a total area of 18 acres. He further concludes that the problems caused by wave action and surge in the harbor basin can be minimized by a breakwater extension and also by placement of a rubble wave absorber, approximately 1,075 feet long, at the inner end of the basin. However, he believes that the actual need and final characteristics of a breakwater extension and other surge reduction measures should be determined by hydraulic model tests during final design. The reporting officer also concludes that Federal participation with the State of Hawaii in the construction and maintenance of a new light-draft harbor at the inner end of Kawaihae Harbor is warranted. He proposes that this Federal participation be limited to provision of 3 main access channel, approximately 900 feet long, 80 to 100 feet wide, and 8 to 10 feet deep, as well as to construction of protective structures.

The District Engineer therefore recommends modification of Kawaihae Harbor and adoption of a new project for light-draft vessels at Kawaihae all in accordance with the general plan contained in this report and subject to the stipulated conditions of local cooperation. The net first cost to the United States for the recommended modifications to Kawaihae Harbor is estimated at \$2,260,000, and the annual maintenance, in addition to that presently required, is estimated at \$5,000; the net first cost to the United States for the recommended light-draft harbor at Kawaihae is estimated at \$30,600 with an annual maintenance cost of \$2,000. The estimated first costs of these projects to the State of Hawaii are \$20,000 and \$26,400, respectively, not including self-liquidating costs for all berthing and necessary shore-side facilities at the light-draft harbor.

REVIEW REPORT ON SURVEY ON NAVIGATION
KAWAIHAE HARBOR? ISLAND OF HAWAII, HAWAII

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Information called for by Senate Resolution 148,
85th Congress, 1st Session, adopted 28 January 1958.

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